



CONTRACT PRICING PROPOSAL COVER SHEET		1. SOLICITATION/CONTRACT/MODIFICATION NO. (RFP) DACW41-02-D-0003 Task Order 0011		FAR Part 15.408 Table 15-2	
NOTE: This form is used in contract actions if submission of cost or pricing data is required. (See Far 52.215-20)					
2. NAME AND ADDRESS OF OFFEROR (Include ZIP Code) MALCOLM PIRNIE, INC. 104 CORPORATE PARK DRIVE WHITE PLAINS, NY 10602		3A. NAME AND TITLE OF OFFEROR'S POINT OF CONTACT KENNETH J. GOLDSTEIN, CGWP		3B. TELEPHONE NO. (914) 694-2615	
4. TYPE OF CONTRACT ACTION (Check)					
<input type="checkbox"/> A. NEW CONTRACT		<input type="checkbox"/> D. LETTER CONTRACT			
<input type="checkbox"/> B. CHANGE ORDER		<input type="checkbox"/> E. UNPRICED ORDER			
<input type="checkbox"/> C. PRICE REVISION/REDETERMINATION		<input checked="" type="checkbox"/> F. OTHER (Specify) New DO on Existing Contract			
5. TYPE OF CONTRACT (Check) <input type="checkbox"/> FFP <input checked="" type="checkbox"/> CPFF <input type="checkbox"/> CPIF <input type="checkbox"/> CPAF <input type="checkbox"/> FPI <input type="checkbox"/> OTHER (Specify)		6. PROPOSED COST (A+B=C)			
A. COST \$656,082		B. FIXED FEE \$42,841		C. TOTAL \$698,923	
7. PLACE(S) AND PERIOD(S) OF PERFORMANCE LOWER PASSAIC RIVER STUDY AREA, NEW JERSEY AUGUST 15 - DECEMBER 31, 2005					
8. List and reference the identification, quantity and total price proposed for each contract line item. A line item cost breakdown supporting this recap is required unless otherwise specified by the Contract (Continue on reverse, and then on plain paper, if necessary. Use same headings.)					
A. LINE ITEM NO.	B. IDENTIFICATION	C. QUANTITY	D. TOTAL PRICE	E. REF.	
WAD 4 WAD 5 WAD 6	Project Management and Community Relations (WO's 1 - 3) Technical Studies and Investigations (WO 5) Data Management and Presentation (WO's 2 and 7)	See Section 6, Above See Section 6, Above See Section 6, Above		Please see enclosed estimate	
9. PROVIDE NAME, ADDRESS, AND TELEPHONE NUMBER FOR THE FOLLOWING (If available)					
A. CONTRACT ADMINISTRATION OFFICE KANSAS CITY DISTRICT, U.S. ARMY CORPS OF ENGINEERS 700 FEDERAL BUILDING KANSAS CITY, MO 64106 (816) 983-3827		B. AUDIT OFFICE U.S. ENVIRONMENTAL PROTECTION AGENCY 290 BROADWAY NEW YORK, NY 10007 (212) 637-3046			
10. WILL YOU REQUIRE THE USE OF ANY GOVERNMENT PROPERTY IN THE PERFORMANCE OF THIS WORK? (If "Yes," identify) As identified in the solicitation <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		11A. DO YOU REQUIRE GOVERNMENT CONTRACT FINANCING TO PERFORM THIS PROPOSED CONTRACT? (If "Yes," complete Item 11B) <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		11B. TYPE OF FINANCING (x one) <input type="checkbox"/> ADVANCE PAYMENTS <input checked="" type="checkbox"/> PROGRESS PAYMENTS <input type="checkbox"/> GUARANTEED LOANS	
12. HAVE YOU BEEN AWARDED ANY CONTRACTS OR SUBCONTRACTS FOR THE SAME OR SIMILAR ITEMS WITHIN THE PAST 3 YEARS? (If "Yes," identify item(s), customer(s) and contract number(s)) <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		13. IS THIS PROPOSAL CONSISTENT WITH YOUR ESTABLISHED ESTIMATING AND ACCOUNTING PRACTICES AND PROCEDURES AND FAR PART 31 COST PRINCIPLES? (If "No," explain) <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO			
14. COST ACCOUNTING STANDARDS BOARD (CASB) DATA (Public Law 91-379 as amended and FAR PART 30)					
A. WILL THIS CONTRACT ACTION BE SUBJECT TO CASB REGULATIONS? (If "No," explain in proposal) <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		B. HAVE YOU SUBMITTED A CASB DISCLOSURE STATEMENT (CASB DS-1 or 2)? (If "Yes," specify in proposal the office to which submitted and if determined to be adequate) <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO			
C. HAVE YOU BEEN NOTIFIED THAT YOU ARE OR MAY BE IN NON-COMPLIANCE WITH YOUR DISCLOSURE STATEMENT OR COST ACCOUNTING STANDARDS? (If "Yes," explain in proposal) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		D. IS ANY ASPECT OF THIS PROPOSAL INCONSISTENT WITH YOUR DISCLOSED PRACTICES OR APPLICABLE COST ACCOUNTING STANDARDS? (If "Yes," explain in proposal) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO			
This proposal reflects our estimates and/or actual costs as of this date and conforms with the instructions in FAR 15.403-5(b)(1) and Table 15-2. By submitting this proposal, we grant the Contracting Officer and authorized representative(s) the right to examine, at any time before award, those records, which include books, documents, accounting procedures and practices, and other data, regardless of type and form or whether such supporting information is specifically referenced or included in the proposal as the basis for pricing, that will permit an adequate evaluation of the proposed price.					
15. NAME AND TITLE (Type) KENNETH J. GOLDSTEIN, CGWP, VICE PRESIDENT		16. NAME OF FIRM MALCOLM PIRNIE, INC.			
17. SIGNATURE 				18. DATE OF SUBMISSION 08/17/2005	

USACE - Kansas City District
Request for Authority To Proceed
ATP 10

1. T.O. No. 0011 Contract No. DACW41-02-D-0003 Date: 17-Aug-05

WAD No. 4-7 WO No. See Attachment 1 WE No. See Attachment 1

2.	A. CURRENT STATUS	Engineering	Construction	Closeout	Fee	Total
	A. Negotiated	\$ 9,986,928	\$ 0	\$ 0	\$ 539,869	\$ 10,526,797
	B. Obligated	\$ 3,133,186	\$ 0	\$ 0	\$ 183,802	\$ 3,316,988
	C. Authorized	\$ 3,133,186	\$ 0	\$ 0	\$ 183,802	\$ 3,316,988
	B. AMOUNT REQUESTED					
	A. Negotiated	\$ 656,082	\$ 0	\$ 0	\$ 42,841	\$ 698,923
	B. Obligated	\$ 3,605,524	\$ 0	\$ 0	\$ 194,624	\$ 3,800,148
	C. Authorized	\$ 3,605,524	\$ 0	\$ 0	\$ 194,624	\$ 3,800,148
	C. REQUESTED STATUS					
	A. Negotiated	\$ 10,643,010	\$ 0	\$ 0	\$ 582,710	\$ 11,225,720
	B. Obligated	\$ 6,738,710	\$ 0	\$ 0	\$ 378,426	\$ 7,117,136
	C. Authorized	\$ 6,738,710	\$ 0	\$ 0	\$ 378,426	\$ 7,117,136

3. A. Amount of this request \$ 3,800,148 Date Required 15-Aug-05

B. Fund Source WBS: New Funds

C. Fund Destination WBS: See Attachment 1

4. Description of work covered by this request: See attached sheet.

5. Attachments showing Work Order/Activity Breakdown: See Attachment 1.

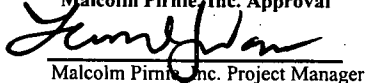
6. Conditions

a. See initial cost proposal submitted on August 2, 2005.

Proposal Dated 23-Sep-02 24-Feb-03 18-Nov-03 08-Jan-04

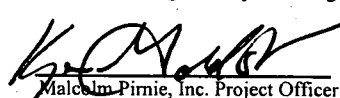
7 Other 22-Jul-04 3-Mar-05 17-Aug-05

Malcolm Pirnie, Inc. Approval


Malcolm Pirnie, Inc. Project Manager

Date

8/17/05


Malcolm Pirnie, Inc. Project Officer

Date

8/16/05

USACE Approval

USACE Technical Manager

Date

Contracting Officer's Representative

Date

Lower Passaic River
T.O. 0011, Mod. 07
August 17, 2005

Work Variance Notification No. 9 for Lower Passaic River Restoration Project
Malcolm Pirnie, Inc.
Contract No. DACW41-02-D-0003

Task	Currently Approved Requirements (ATP 9)	Additional Funds Proposed	Amt of Funding Proposed from Tech Support	Source of Funds	Rationale for Source of Funds	Technical Justification
WAD 03, WO 04, WE 4.2b	\$29,676	\$82	\$0	WAD 03, WO 04, WE 4.2a	Minish Park Data Upload task will require \$5400 based on Battelle lump sum proposal dated April 21, 2005 and Malcolm Pirnie review effort, which is less than the obligated amount of \$6,532.	Funds are to be allocated to address a slight overage in the task.
WAD 03, WO 05, WE 5d	\$36,972	\$5,350	\$5,350	WAD 04, WO 03, WE 3.3a	Redistribution of monies from Technical Support.	Funds were reallocated from this task in WVN 8; however, subcontractor invoicing had not been fully taken into account.
WAD 03, WO 05, WE 5g	\$11,066	\$1,236	\$236	WAD 03, WO 04, WE 4.2a and WAD 04, WO 03, WE 3.3a	Minish Park Data Upload task will require \$5400 based on Battelle lump sum proposal dated April 21, 2005 and Malcolm Pirnie review effort, which is less than the obligated amount of \$6,532. An additional \$236 will be redistributed from Technical Support.	Funds were reallocated from this task in WVN 8; however, subcontractor invoicing had not been fully taken into account.
WAD 04, WO 02, WE 2.2b	\$14,354	\$39,931	\$0	WAD 04, WO 02, WE 2.2a and new cost proposal	WAD 04, WO 02, WE 2.2a was completed underbudget; therefore, these monies will be redistributed.	The number of required drafts and stakeholder reviews was increased significantly from the proposed effort by USEPA.
WAD 05, WO 01, WE 1.2b	\$68,763	\$8,833	\$1,469	WAD 05, WO 01, WE 1.3; WAD 05, WO 01, WE 1.4a; WAD 04, WO 03, WE 3.3a	WAD 05, WO 01, WEs 1.3 and 1.4a were completed underbudget; therefore, these monies will be redistributed. An additional \$1469 will be redistributed from Technical Support.	Additional effort was required to research and reconcile the Mean Low Water datums on the 1989 and 2004 USACE and TSI bathymetric surveys.
WAD 05, WO 01, WE 1.4d	\$6,934	\$3,031	\$3,031	WAD 05, WO 01, WE 3.3a	Funding will be redistributed from Technical Support.	The DQO development effort for this project is extremely complex and has received extensive comments and input from the stakeholders, TAC, and team members.
WAD 05, WO 01, WE 1.4e1	\$22,176	\$852	\$852	WAD 05, WO 01, WE 3.3a	See note for WAD 05, WO 01, WE 1.4d above.	This task was slightly overbudget.
WAD 05, WO 01, WE 1.4e2	\$2,522	\$599	\$599	WAD 05, WO 01, WE 3.3a	See note for WAD 05, WO 01, WE 1.4d above.	This task was slightly overbudget.
WAD 05, WO 01, WE 1.5b	\$88,830	\$80,929	\$0	New cost proposal	NA	Additional effort was expended on the Draft WP and FSP Volume 1 under client direction to produce an implementable set of documents in Spring 2005.
WAD 05, WO 01, WE 1.5c	\$25,258	\$75,091	\$0	New cost proposal	NA	This task will require significant additional effort to definitize the water column sampling program and address the large number of detailed comments received on the Conceptual Site Model and specific field sampling methodologies.
WAD 05, WO 01, WE 1.6a	\$22,567	\$23,710	\$0	New cost proposal	NA	Additional effort was expended on both the Pre-Draft and Draft QAPP tasks, under client direction to produce an implementable set of documents in Spring 2005. Some effort that should have been charged to the Draft QAPP task was continuously charged to the pre-draft task. Significant effort was expended to coordinate/assess the feasibility of the requested Reporting Limits for each parameter based on the data needs and DQOs for each team member (e.g., extremely sensitive RLs required for BERA and HHRA-related data).
WAD 05, WO 01, WE 1.6b	\$29,085	\$8,146	\$529	WAD 05, WO 01, WE 1.7a; WAD 05, WO 01, WE 1.7b; WAD 04, WO 03, WE 3.3a	WAD 05, WO 01, WEs 1.7a and 1.7b were completed underbudget; therefore, these monies will be redistributed. The remaining \$529 will be transferred from Technical Support.	See note for WAD 05, WO 01, WE 1.6a above.
WAD 05, WO 01, WE 1.6c	\$11,046	\$20,000	\$0	New cost proposal	NA	This task will require significant additional effort to adapt the QAPP to reflect the methods and reporting limits selected during laboratory subcontract negotiation, final field programs, and to respond to the volume of comments received on the QAPP, DQOs, and data types/data uses table.
WAD 06, WO 03, WE 3.1	\$31,276	\$10,179	\$0	WAD 06, WO 05, WE 5.2	\$0 change to address error in task charges	See note to left.
WAD 06, WO 03, WE 3.2	\$21,294	\$18,211	\$0	WAD 03, WO 05, WE 5.e and 5.f	\$0 change to close WAD 03.	WAD 06 scope to be increased to reflect reorganization of funds.

**Proposal Clarifications for Lower Passaic River Restoration Project
Remedial Investigation / Feasibility Study**

WAD 04 – Project Management and Community Relations

WO 1 – Project Management and Administration

1.2 – Project Support Documentation and Administration (2005)

Battelle: 51 hours. Battelle will prepare monthly budget status reports and progress reports, invoices, and additional weekly project reports and schedule updates. Costs for administrative and project support activities are based on 6 months in 2005 (June through December).

2005 EV & Progress reports: PM 1.5 h/month (6 months); 9 h
Researcher 1 h/month (6 months); 6 h
2005 Monthly invoicing: PM 1h/month (6 months); 6 h
Project Administrator 1h/month (6 months); 6 h
2005 Weekly progress: PM 1/h week (24 weeks); 24 h

Deliverables: Monthly budget status and progress reports, weekly progress updates

1.4 – Project Communications

Battelle: 442 hours. Battelle will provide key project management and technical staff for teleconferences on various technical topics. These calls are necessary for brainstorming project strategies and technical approaches to tasks, or general exchange of information specific to a project task. Costs for technical topic calls are based on 6 months in 2005 (June through December). Additionally, Battelle project management staff will keep abreast of technical information updates on PREmis and monitor task activities on the project schedule on a regular basis. Costs for monitoring PREmis are based on 6 months in 2005 (June through December) for project management staff.

Hours are also proposed for an additional Battelle staff member to participate in weekly project management calls from June through December 2005.

Battelle staff will attend quarterly progress/strategy meetings at Pirnie's offices in Fair Lawn, NJ. Costs for meetings are based on 2 staff attending each of 2 meetings in 2005. These meeting units can also be used for meetings held at EPA's offices in New York, NY. Travel costs also include 1 trip each for 3 staff from Boston, MA and/or Columbus, OH to New York, NY for the Risk Assessment Workshop planned for September 2005.

Weekly Management Calls: 24 weekly calls, 6 months, 0.5 h/week for Gunster

2005 Technical topic teleconferences: 3, 1-h calls/month, 6 months
3 h/month Barrows 18 h; 3 h/month Gulbransen 18 h; 3 h/month Gunster (or Durell) 18 h; 3 h/month Richardson 18 h; 3 h/month Rodgers 18 h; 3 h/month Gnatek (or Schaub) 18 h

PREmis schedule and update review 2005: 6 h/month, 6 months for Barrows 36 h

**Proposal Clarifications for Lower Passaic River Restoration Project
Remedial Investigation / Feasibility Study**

2005 Battelle attendance at quarterly progress/strategy meetings at Pirnie's offices in Fair Lawn, NJ - 2 staff/meeting, 2 meetings. Assume 1 meeting Gulbransen from NY-8 h; 1 meeting Barrows from NY-8 h; 1 meeting Gunster (or Durell) from MA-12 h, 1 meeting Richardson from MA-12 h.

Travel Expenses from Boston, MA, and/or Columbus, OH to Fair Lawn (Newark), NJ or New York, NY-2005 (Includes Risk Assessment Workshop - 3 staff 2 days Boston, MA or Columbus, OH to NY.)

Airfare	\$498
Mileage to-from airport (50 mi @ \$0.40/mi; \$5 tolls; \$20 parking	\$45
Car Rental airport to Fair Lawn	\$80
Lodging	\$165
Meals	\$46
Cost per Trip	\$788
Number of Trips	5
Total	\$3940

Travel Expenses from Stony Brook, NY to Fair Lawn, NJ

Train fare	\$35
Lodging	NA
Meals	\$25
Cost per Trip	\$60
Number of Trips	2
Total	\$120

BERA Workshop

Under Project Communications, Battelle will participate in planning and preparation, attendance, and post-meeting activities for the Baseline Ecological Risk Assessment (BERA) Workshop.

Planning and preparation activities are broken down as follows. Time for each of these activities also includes teleconferences and presentation materials.

- Identification of Chemicals of Potential Ecological Concern (COPECs). Develop a flow schematic depicting recommended approach; identify candidate screening values; identify list of questions for discussion (*e.g.*, use of background, limiting wildlife exposure modeling to bioaccumulators only, role of professional judgment in streamlining process to focus on significant risk drivers, *e.g.*, aluminum); identify and understand differences between existing lists.
- Environmental Fate and Effects of COPECs. Provide several draft matrices (one per each distinct fate category) or figures that depict chemical class, environmental fate, primary ecotoxicological effects, and affected receptors of concern (ROCs).
- Key Exposure Pathways. List all potentially complete exposure pathways and provide recommendations and detailed rationale for those to be quantitatively evaluated in the BERA.
- Ecological Receptors Potentially at Risk. Prepare list of distinct receptor groups and provide recommendations and detailed rationale for those that should be evaluated in the BERA; develop a matrix of selection criteria for the ROC selection process.

Proposal Clarifications for Lower Passaic River Restoration Project Remedial Investigation / Feasibility Study

- Overview of Conceptual Site Model (CSM). Discuss integration of existing pathways figure with the geochemical CSM. Discuss matrices (figures) prepared for Environmental Fate/Effects category above depicting primary ecological effects to each ROC associated with each chemical class.
- Risk Hypotheses. Prepare detailed list of candidate risk questions (and examples of different formulations of risk questions including probabilistic) for each assessment endpoint for discussion and consensus.
- Assessment Endpoints. Prepare comprehensive list of candidate assessment endpoints and recommendations and detailed rationale for those that should be evaluated in the BERA; prepare different formulations of assessment endpoints (including probabilistic) for discussion and consensus.
- Measurement Endpoints. Prepare comprehensive list of candidate measurement endpoints and recommendations and detailed rationale for those that should be included in the BERA.
- Identify Gaps in Field Sampling Plan (FSP) Relative to Data Quality Objectives (DQOs). Prepare a comprehensive summary of proposed studies in FSP 2 and evaluate linkages to the established DQOs.
- Risk (including Uncertainty) Characterization. Prepare memorandum (including example tables, if necessary) that presents options, makes recommendations, and provides rationale for proposed risk characterization methodology, weight of evidence (WOE) approach, and risk categorization (i.e., high/low). Identify and rank preliminary list of risk uncertainties.

Total proposed effort for Risk Assessors (Gunster, Richardson) 78 h; for Researchers (Schaub, Gnatek, Manley) 78 h

Travel (6 h/person) – travel expenses addressed above

Attendance, 2-day meeting (Gunster, Richardson, Rodgers) (16 h/person)

Post-meeting activities (8 h/person)

Deliverables: Presentation materials, “white papers,” and other handouts for the BERA workshop, workshop minutes, QC Checklist.

WO 2 – Community Relations

2.2b – Draft Community Involvement Plan (2005)

MPI: 272 hours. The November 18, 2003 proposal / negotiated budget contemplated a single draft for agency review of a Lower Passaic River Restoration Project Community Involvement Plan (CIP). Since that time, the CIP effort for the LPRRP has been combined with that for the Newark Bay study, with both projects contributing to the funding. In addition, EPA has restructured the CIP development process. An iterative series of drafts is now required to accommodate an expanded set of reviews by partner agencies, stakeholders and the public, leading up to a public forum for the two projects and preparation of the final CIP. It is now anticipated there will be at least four separate formal drafts prepared, along with numerous informal submittals for collaborative development with EPA’s community involvement coordinator for the projects. At each stage, comments will be compiled by EPA and provided to Malcolm Pirnie for preparation of the next revision to the document.

Proposal Clarifications for Lower Passaic River Restoration Project Remedial Investigation / Feasibility Study

In addition to these activities, Malcolm Pirnie is required to prepare for and facilitate a minimum of two all-day strategy/planning/review sessions for receipt and discussion of agency comments on the CIP. The third and fourth formal drafts involve multiple iterations of a greater number and complexity of graphics than originally envisioned. Research required on demographics and other topics, as well as manipulation of the associated data, are more extensive than originally assumed. Community interviews required less budget than originally envisioned, so the excess has been redirected to this task (refer to WVN 9); the following level of effort (LOE) is required above that amount to complete the draft CIP development effort:

Deliverables: Draft CIP, QC Checklist (4).

WAD 05 – Technical Studies and Investigations

This WAD provides for: Responses to additional comments on the Final Modeling Plan; completion of the Draft and Final WP/FSP Volumes 1 and 3; and completion of the Pre-Draft and Final QAPP. The following work orders are proposed:

WO No. 1 – RI/FS Work Plan Preparation

1.4c – Response to Comments/Final Modeling Plan – Response to Additional Comments

MPI: 36 hours. HQI: 116 hours. For the Draft Final Modeling Plan, HydroQual was tasked to respond to Technical Advisory Committee (TAC) and Agency comments and prepare a Draft Final submittal. Because of the more extensive array of commenters, including EPA reviewers, PRPs and their consultants, and other stakeholders, as well as more focused understanding of the nature of the issues of concern to the reviewers (including those of the TAC), a greater effort is required by HydroQual to respond to comments and prepare the Final Modeling Plan than assumed when preparing the November 18, 2003 proposal. In addition a greater effort is required for Malcolm Pirnie to perform the quality control (QC) review of the pre-final document prior to finalization for publication, as well as verify consistency between the revised Work Plan and the Modeling Plan. The original response to comments budget contemplated a much smaller group for review of the Draft Modeling Plan. MPI's effort is proposed to augment the previously authorized budget for review of the Draft Final document and comment responses. No further effort will be expended until the compiled comments are provided by USEPA and approval is given to proceed with response and document revision effort.

Deliverables: Final Modeling Plan, QC Checklist.

1.5b – Draft Final WP/FSP Volume 1

Proposal Clarifications for Lower Passaic River Restoration Project Remedial Investigation / Feasibility Study

MPI: 612 hours. The Work Plan/Field Sampling Plan/Quality Assurance Project Plan scopes and budgets were originally negotiated in the fall of 2003. Since that time, a number of changes to the initially agreed-upon elements of work and project task sequence have occurred, many quite recently. These changes have required greater expenditures than anticipated to complete activities accounted for under the original budget.

In the revised proposal, dated November 18, 2003, an orderly process was envisioned in which comments on the preliminary draft document by partner agencies compiled by EPA and the KC District would be considered together with results of a historical data evaluation and input from / interaction with modelers and risk assessors, and a more detailed set of rationales and procedures prepared. It was also assumed that the WRDA program would undertake companion activities in a rational sequence. The actual sequence of the work did not match the original assumptions, nor have some of the companion activities been undertaken, in some part due to funding issues, as well as significant difficulties in assembling some key historical data sets, including, for example, data collected under the CARP program and historical bathymetry data necessary for data interpretation. In addition to these general factors, a series of major events or decisions also influenced the costs incurred. These include:

1. The decision to attempt a field program of hydrodynamic modeling-oriented sampling, complementing that being performed by Rutgers under contract to NJDOT/OMR, and limited sediment stability-oriented experiments in 2004. The sediment stability experiments were delayed until 2005, and the scope was revised and expanded, resulting in the preparation of a revised Hydrodynamic Modeling Plan, which was appended to the Draft Final FSP.
2. The timing of the decision to conduct geochemical evaluations led to the work being done in the middle of the WP/FSP development process. These evaluations, authorized under an interim WVN in mid-February, began to produce results in early to mid March and increased the understanding the site, particularly in the lower six miles; this created a dynamic knowledge base and necessitated refinements and reworking of sampling rationales as the plan was being produced. This re-working was of value in refining the field program but had an immediate cost in technical time spent on the plan rationale and the need to engage modelers and risk assessors in collaboration.
3. Failure of Congress to provide sufficient funding to the NY District to carry out companion activities planned to be conducted under WRDA authorities; NY District-funded geophysical surveys should have been conducted in late 2004 or early 2005 in order to most effectively inform the design of other CERCLA-funded investigation elements (such as sediment transport experiments and sediment coring/sampling). The failure to conduct the geophysical surveys under the WRDA program as anticipated, threatened the scheduling of the sediment coring and chemical sampling program. To maintain the project schedule, a geotechnical program was designed and incorporated into the previously-prepared hydrodynamic and sediment experiment work plan noted under item no. 1 above. In addition, WP/FSP budget was expended reviewing and refining the scope (extracted from the pre-draft FSP 3) of the geophysical investigation itself, to facilitate effective direction to the geophysical subcontractor (see no. 5 below).
4. Over 2004 -2005 the project modeling needs were re-evaluated; the addition of new sampling locations caused by this re-evaluation resulted in the expansion of the 2004 work plan to include the additional locations with appropriate rationale.
5. The decision in February 2005 by OMR/NJDOT to attempt to conduct the geophysical surveys in place of the NY District required survey scope refinement and development of scope for confirmatory coring/sampling and associated reporting. In addition, text of the FSP 3 section

Proposal Clarifications for Lower Passaic River Restoration Project Remedial Investigation / Feasibility Study

regarding geophysical surveys was revised/updated using FSP1 budget from the CERCLA project because neither the NY District nor OMR/NJDOT had funds in place for the team to work on the plan drafted under the WRDA framework. Revision of this effort led to subsequent removal of the geotechnical coring program from the 2004 hydrodynamic plan in favor of the FSP geophysical survey and associated confirmatory cores.

6. Addition of a senior government reviewer of the modeling and sampling effort occurred in the middle of the WP/FSP development process. Introducing a new technical reviewer late in the project planning phase required additional effort to explain the project and discuss comments. A number of topics and previously negotiated decisions had to be revisited and debated.
7. A decision to engage stakeholders in Work Groups was announced in early February, just 7 weeks before the work plans were due; this resulted in a new group of commenters (including PRPs) to accommodate in justifying program elements, which was not contemplated prior to the publication of this version of the plans in the proposed effort.

This task provides for additional funding to complete the Draft Final WP/FSP Volume 1.

Deliverables: Draft Final WP/FSP Volume 1, QC Checklist.

1.5c – Response to Comments and Final WP/FSP Volume 1

This task provides for additional funding to complete the Final WP/FSP Volume 1.

MPI: 610 hours. For similar reasons that increased draft final WP/FSP Volume 1 costs, the LOE required to respond to agency/stakeholder/TAC comments and provide a final document will also increase above that originally proposed. Stakeholder and TAC comments on the Draft Final FSP prompted a significant water column program development effort. In addition, effort is required to review USGS proposals for monitoring of the Dundee Dam and develop alternate work scopes for upstream load monitoring.

To respond to comments and to further incorporate the results of the geochemical evaluation into the planning documents (see WE 1.5b above, item no. 2), it is necessary to build a more robust geochemical conceptual site model (CSM). The new CSM will provide the appropriate basis to be updated and refined as the project unfolds. This effort addresses the geochemical and physical processes and mechanisms affecting contaminant fate and transport as underpinning for refinement of the CSM for risk assessment purposes to be performed under WAD 05, WO 2.2b.

In order to mobilize the field effort in 2005, comments on the FSP will be addressed section by section. This will allow interim approval of individual elements of the program and avoid delaying critical elements while consensus on approach/locations for other elements is reached.

Deliverables: Final WP; Final FSP Volume 1 (by section), QC Checklists.

1.5g – Revised Pre-Draft FSP 3

Proposal Clarifications for Lower Passaic River Restoration Project Remedial Investigation / Feasibility Study

MPI: 33 hours. Malcolm Pirnie will update the Preliminary-Draft Field Sampling Plan (FSP) Volume 3 to a revised Pre-Draft in accordance with comments that have been provided to date. Sampling site locations will not be included in the pre-draft FSP 3. The LOE proposed is approximately 30% of that required for revision; remaining costs are being fronted by NJDOT/OMR, the WRDA sponsor.

Deliverables: Revised pre-draft FSP Volume 3, QC Checklist.

1.6a – Pre-Draft/Outline QAPP Response to Comments

MPI: 250 hours. This task provides for additional funding to complete the Pre-Draft QAPP (refer to explanation under WE 1.5b above). Charges for the preparation of the Draft QAPP were inadvertently applied to the Pre-Draft task. The additional effort on the preparation of the Draft QAPP deliverable was necessary to address the comments received on the pre-draft DQOs, coordinate with USEPA regarding CLP involvement on the project, obtain consensus among consultant team members on data needs/data uses and develop a documentary table, accommodate the elements of the developing field programs, and identify necessary reporting limits and analytical sensitivity for the required parameters. Resolving the appropriate reporting limits required a number of iterations to reach consensus on limits that are practically achievable in the preferred laboratory structure (*i.e.*, as much work as possible being done through CLP) while satisfying the concerns of risk assessors.

Deliverables: Pre-Draft QAPP.

1.6c – Response to Comments and Final QAPP

MPI: 134 hours. This task provides for additional funding to respond to comments and complete the Pre-Final QAPP (refer to note under WE 1.5b above). The effort required to complete the Final QAPP is greater than that estimated in the November 2003 proposal due to the number of comments received, the need to incorporate and integrate the field program elements still under development during the preparation of the Final WP/FSP (including updates to the DQOs and the Data Needs/Data Users Table), to complete coordination with the CLP program laboratories on required analyses and RLs, and to incorporate the laboratory-specific information on analytical methods and sensitivity available on completion of the subcontractor laboratory bidding and selection process.

Deliverables: Final QAPP, QC Checklist.

WAD 06 – Data Management and Presentation

This WAD provides for: maintenance and support of the project website (private); data analysis and interpretation; validation of data; preparation of data gap/data evaluation reports, as well as supplemental work plans for subsequent sampling events. The following work orders are proposed:

Proposal Clarifications for Lower Passaic River Restoration Project Remedial Investigation / Feasibility Study

WO 2 –Public Website

2.1 – Maintenance and Support (2005)

MPI: 320 hours. Additional funding is proposed to continue maintenance and support for the public website. Under this task, Malcolm Pirnie will provide periodic information updates and technical enhancements to improve web site functionality and keep information presented on the site current. The updates to the public web site will include, but will not be limited to, documents/information supplied by USEPA, USACE and other agencies, including fact sheets, news items, Q&A, and public documents. The updates/enhancements will be performed only when requested by either USEPA or USACE. If the updates involve site layout or presentation changes, WebEx demonstrations may be used, as requested, to show the proposed changes prior to a release.

Funds are proposed to respond to requests as they are made by the USACE and USEPA. Other various technical maintenance and support functions related to the operations of the web site will also be provided on an as-needed basis.

Technical support will be provided for items including, but not limited to:

- Software and operating system upgrades (assumes quarterly addition of patches and security updates)
- General system troubleshooting.
- Maintenance for the hardware (time to run backups, and maintenance procedures)
- Modifications to reports.
- Enhancements to system functionality.

WO 7 – Data Analysis and Interpretation (2005)

7.3 – Additional Geochemical and Statistical Analysis (2005)

MPI: 2,104 hours. This work effort is designed to answer several geochemical study questions listed in a technical memorandum dated May 18, 2005 and continue the geochemical analysis and historical data evaluation for the project. These study questions build on the work and recommendations included in Attachment B of the project Work Plan, and they will continue to evolve as more data become available and the conceptual site model is further developed. Each study question listed in this memo is followed by one or more tasks that are designed to provide the analyses to address the question. Note that some tasks are listed multiple times since they address more than one geochemical question (however, these analyses are planned to be performed only once). The listed tasks should not be considered exhaustive, and additional tasks may be warranted based on the evolving findings from the stated analyses. The sequence is not strictly identical to that listed in the May 18, 2005 memo since some questions and tasks have been deferred for later evaluation or are being accomplished under previously scoped work efforts (and are not included here).

1) What more can be known about the fate and transport of solids in the Passaic River?

**Proposal Clarifications for Lower Passaic River Restoration Project
Remedial Investigation / Feasibility Study**

- a) What is the long-term net amount of solids eroded / deposited within each reach of the Passaic River?
 - i) Building on the bathymetric comparisons previously conducted, determine net gain of solids or net loss of solids over each river reach and across the entire river; estimate a solids mass balance for the river.
 - ii) Use radionuclide data to establish local deposition rates over the full 17-mile stretch of the Lower Passaic River.
 - b) What is the impact of a major flow event on the movement of solids and contaminants downriver?
 - i) Using the available lead-210 data, date the discontinuities that are observed in the sediment cores – match these dates to major flooding events.
 - ii) Map the location of these discontinuities.
- 2) What is the nature and extent of historical contamination in the Lower Passaic River?**
- a) What is the extent of contamination in the sediment beds?
 - i) *Continue work started previously to map the concentration of contaminants in the sediments, including PCBs and heavy metals.*
 - ii) NA
 - iii) Calculate the mass per unit area (MPA) for each benchmark chemical to estimate an inventory and to identify areas of concern (use of this calculation does not imply that MPA will necessarily be used or recommended as an action criterion in subsequent phases of the project).
- 3) What is the fate and transport of each benchmark chemical in the Passaic River?**
- a) How is the transport of solids affecting the fate and transport of benchmark chemicals?
 - i) Identify a chemical fingerprint unique for Newark Bay and trace this fingerprint into the Passaic River. Possible fingerprints include DDT and metabolites, PCDD/F congener ratios, and heavy metal ratios.
 - ii) Incorporate findings of task 1)(a)(i).
 - iii) Estimate mass of benchmark chemicals using the average surface concentrations and net gain or loss of solids.
 - iv) Map the ratio of benchmark chemicals to cesium-137 along the Lower Passaic River to identify sources.
 - v) *Examine variations in the ratio of total DDT/2,3,7,8-TCDD in previously determined erosional and depositional environments to evaluate the fate and transport of total DDT and 2,3,7,8-TCDD.*
 - vi) Compare benchmark metal concentrations to one another to identify those that are inversely or directly related – draw inferences regarding the fate and transport of the metals compared.
 - b) What ratios are characteristic of a given waterbody that can be used to fingerprint contaminant transport?
 - i) Incorporate findings of task 3)(a)(i).
 - ii) Use principal component analysis of PAHs and PCBs to attempt to identify source fingerprints; and examine specific ratios across the Lower Passaic River and into adjacent waterbodies to evaluate fate and transport.
 - c) What is the history of contamination for each benchmark chemical?

Proposal Clarifications for Lower Passaic River Restoration Project Remedial Investigation / Feasibility Study

- i) Building on the bathymetric and radionuclide analyses previously conducted, examine cores from depositional areas to determine chronology and loading of additional benchmark chemicals.

Deliverables: At the end of this analysis, a technical document containing plots and maps of contaminant concentration in the various media, statistical summaries, and discussion of analysis findings will be produced by the team, QC Documentation Checklist.

7.5.b – Draft Round 1 Data Gap/Data Analysis Report/Supplemental WP

In the March 3, 2005 proposal, it was intended that WE 7.5b address both reporting and interpretation of data from the 2005 field investigations and the preparation of a Supplemental WP to identify sampling proposed for the 2006 field season (e.g., additional and data gap low resolution coring locations). [In comparison, the Project Plan Updates (refer to WAD 05 WE 1.8c in the March 3, 2005 proposal) are intended to address “mid-stream” corrections required during the field work to the FSP and/or SOPs for the planned dynamic/adaptive approach.] In the current proposal, effort is added to WE 7.5b to interpret WRDA data from the 2005 geophysical investigation.

MPI: 145 hours. Malcolm Pirnie will generate a Geophysical Survey Memo to include the data collected during the field investigation. The Memo will include:

- A brief description of the detailed field procedures employed by the geophysical surveyor;
- Processed geophysical data maps;
- Core logs;
- Summaries of the geotechnical laboratory data;
- Planimetric maps showing sediment texture types;
- Cross-sections and profiles showing geologic units;
- Manifests for IDW disposal;
- A brief narrative describing the sediment surface texture and subsurface geology.
- Prepare and interpret Maps/GIS layers for public presentation.

Deliverables: Geophysical survey memo; QC Checklist.

Note: 1. All WAD 03 tasks have a zero in this column since this WAD was negotiated prior to November and December 2003.

NEGOTIATED PROPOSAL
version: 2005/08/17

Lower Passaic River
T.O. No. 011, Mod. 07
August 17, 2005
HydroQual

ESTIMATED COSTS FOR LOWER PASSAIC RIVER RESTORATION PROJECT
HYDROQUAL, INC. UNDER SUBCONTRACT TO MALCOLM PIRNIE, INC.
CONTRACT NO. DACW41-02-D-0003

							Total Labor Hours	Total Billable Labor	ODC	Profit	Travel No. of Round Trips from Mahwah to New York (60 miles RT)	Travel No. of Roundtrips from Mahwah to Newark, NJ (50 miles RT)	Travel Milage Costs @ .365/Mile	Tolls: \$/ Round Trip	No. of Lodging and Meal Days	Lodging	Meals and Incidental Expenses	Other Travel Costs	Total Travel Cost	Total Cost (Including Fee)			
TITLE:																							
Group 1																							
Group 2																							
Group 3																							
Group 4																							
Group 5																							
Contract Year 3 Rates (2004):							\$166.96	\$142.90		\$100.15													
Contract Year 4 Rates (2005) [Jan01 - Dec 31]:							\$188.83	\$163.91	\$144.01	\$113.83	\$78.29												
Contract Year 5 Rates (2006) [need to update]:							\$196.38	\$170.47	\$149.77	\$118.38	\$81.42												
TASK DESCRIPTION																							
05		Technical Studies & Investigations																					
05		1 Work Plan Preparation																					
		1.4 Modeling Plan																					
		1.4c RTC/Final Modeling Plan (2005)																					
							36	40	40			116	\$19,115	\$191	\$1,931					\$0	\$21,237		
SUBTASK-SUBTOTAL							36	40	40	0	0	116	\$19,115	\$191	\$1,931	0	0	\$0	\$0	0	\$0	\$0	\$21,237
SUBTOTAL							36	40	40	0	0	116	\$19,115	\$191	\$1,931	0	0	\$0	\$0	0	\$0	\$0	\$21,237
TASK ORDER TOTAL WAD 05							36	40	40	0	0	116	\$19,115	\$191	\$1,931	0	0	\$0	\$0	0	\$0	\$0	\$21,237
TASK ORDER TOTAL							36	40	40	0	0	116	\$19,115	\$191	\$1,931	0	0	\$0	\$0	\$0	\$0	\$0	\$21,237

**ESTIMATED COSTS FOR LOWER PASSAIC RIVER RESTORATION PROJECT
BATTELLE UNDER SUBCONTRACT TO MALCOLM PIRNIE, INC.
CONTRACT NO. DACW41-02-D-0003**

Battelle Proposal No. (TBD)																				Total Labor Hours	Total Billable Labor	ODCs	Profit or Fee	Travel No. of Round Trips from Duxbury/Boston, MA to NY, NY; or Fair Lawn, NJ; or White Plains, NY	Travel No. of Roundtrips from Stony Brook, NY to NY, NY; Fair Lawn, NJ; or White Plains, NY	Airfare or Train Boston- NY (# Round Trip * \$498/Trip)	Round Trip Train from Stony Brook, NY to NY, NY; Fair Lawn, NJ @ \$30/trip	Auto Travel Mileage Costs @ .405/Mile	Tolls: \$10/ Round Trip	Total No. of Overnights	No. of Meal Days	Hotel NY City = \$165/Night Meals= \$46/Day Total= \$211/Day	Meals and Incidental Expenses [for day trip] (\$25)	Other Travel Costs	Total Travel Cost	Total Cost (Including Fee)	
	Technical Director (Gulbransen)	Project Manager (Barrows)	Database Manager	Database Specialist 1	Database Specialist 2	IT Level 1, Engineer 1 or Statistician	IT Level 2	Field Scientist 1	Field Scientist 2	Quality Assurance Manager (Buhl)	Researcher 1 (Schaub)	Researcher 2 (Gnatek, Manley)	Researcher 3	Technical Expert (Albro)	Risk Assessor 1 (Gunster, Kelley)	Risk Assessor 2 (Bonnievie, Rodgers)	Sr. Chemist	Production (Mongin)	Admin. Assistant																		Project Administrator (Larson)
Contract Year 4 Rates (2005)	\$171.00	\$149.00	\$144.00	\$87.00	\$77.00	\$146.00	\$109.00	\$120.00	\$103.00	\$105.00	\$90.00	\$87.00	\$77.00	\$220.00	\$165.00	\$134.00	\$173.00	\$57.00	\$73.00																		\$84.00
Contract Year 5 Rates (2006)	\$178.00	\$155.00	\$150.00	\$91.00	\$80.00	\$152.00	\$113.00	\$125.00	\$107.00	\$109.00	\$94.00	\$91.00	\$80.00	\$229.00	\$172.00	\$139.00	\$180.00	\$59.00	\$76.00																		\$87.00
Please note: These costs are provided for budgetary planning purposes only and should not be considered a formal offer from Battelle at this time.																																					
WAD WO Should you wish to pursue the outlined plan further, a formal proposal will be submitted by Battelle's contracting office for your approval.																																					
TASK DESCRIPTION																																					
04 Project Management & Community Relations																																					
1 Project Management and Administration																																					
1.2 Project Support Documentation and Administration (2005)																																					
SUBTASK-SUBTOTAL																																					
1.4 Project Communications (Teleconferences, Meetings) (2005)																																					
SUBTASK-SUBTOTAL																																					
SUBTOTAL																																					
TASK ORDER TOTAL WAD 04																																					
05 Technical Studies & Investigations																																					
1 RI/FS Work Plan Preparation																																					
1.5 RI Work Plan (WP) and Field Sampling Plan (FSP)																																					
1.5b Draft Final WP/FSP Volume 1 (2005)																																					
1.5c RTC and Final WP/FSP Volume 1 (2005)																																					
SUBTASK-SUBTOTAL																																					
SUBTOTAL																																					
TASK ORDER TOTAL WAD 05																																					
TASK ORDER TOTAL WADS 04 and 05																																					